

CHAPTER VI

CONCLUSION

Seventeen Thai medicinal plants; *Andrographis paniculata*, *Bridelia ovata*, *Cissus quadrangularis*, *Citrus reticulata*, *Clinacanthus siamensis*, *Cocos nucifera*, *Costus speciosus*, *Momordica charantia* var *maxima*, *Momordica charantia* var *minima*, *Nephelium lappaceum*, *Orthosiphon aristatus*, *Phyllanthus amarus*, *Schefflera leucantha*, *Thunbergia laurifolia*, *Vitis vinifera*, *Barleria lupulina*, and *Clinacanthus nutans* were selected to screen for anti-HSV-2 activity *in vitro* by plaque reduction assay. Their fractions were tested at the nontoxic concentrations to Vero cells and not more than 1,000 µg/ml.

In this study, most of the crude extracts (79 of 90 fractions, 17 plants) plants exhibited positive activity (ED_{50} less than CD_{50}) against HSV-2. Inactivation of the virus was the most successful treatment. Anti-HSV-2 activity of each fraction was evaluated by selective index (SI). The SI showing efficient should be antiviral activity higher than 10. In this study, 11 plants comprising *Barleria lupulina*, F1, F2; *Nephelium lappaceum* F3, F4, F5; *Clinacanthus siamensis*, F1, F3, F4; *Vitis vinifera*, F1, F3, F5; *Thunbergia laurifolia*, F1, F5; *Phyllanthus amarus*, F3, F4, F5; *Orthosiphon aristatus*, F2, F3, F5; *Costus speciosus*, F1, F3, F4; *Bridelia ovata*, F3, F4, F5; *Clinacanthus nutans*, F4; and *Cissus quadrangularis*, F1, F5 exhibited $SI > 10$. The ED_{50} of these extracts except *Cissus quadrangularis*, F5, were not more than 45 µg/ml. These 10 medicinal plant extracts were expected to contain actively anti-HSV agents and should be further studied for exploring a newly anti-HSV compound in the future.